

Montana DEQ Forest Fire Smoke Advisory

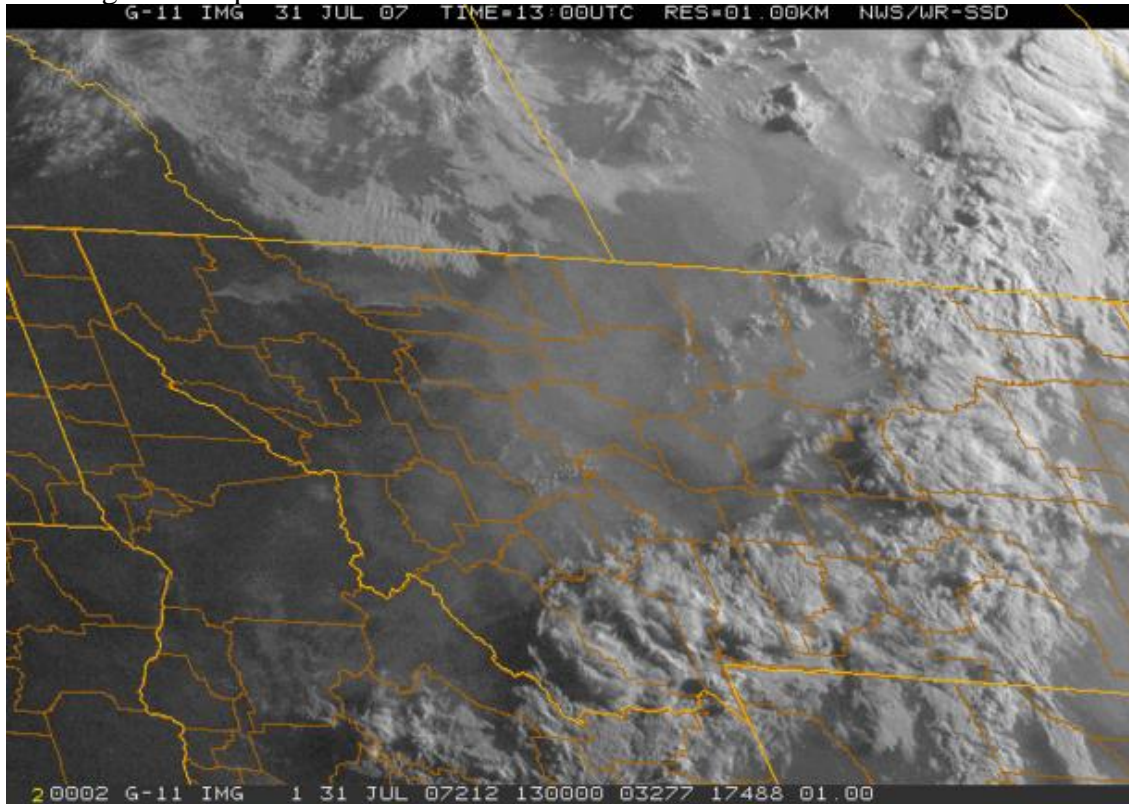
July 31 2007

10:00 AM Tuesday

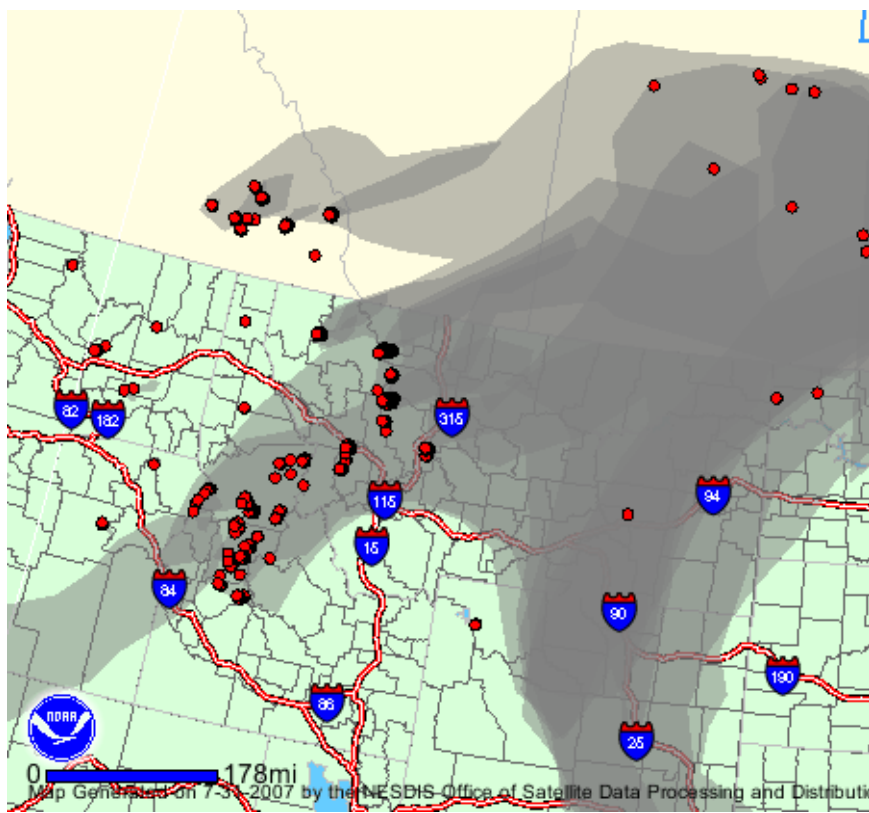
Current Situation

This morning's satellite photo looks very similar to yesterday's, with a broad swatch of smoke drifting over Montana east of the continental divide and visible plumes stretching out to the east from the Brush Creek, Skyland, and Ahorn fires. Conditions in the areas immediately downwind of those fires are expected to be [UNHEALTHY](#) or worse. Smoke conditions in the reporting stations are not too bad this morning. Hamilton and Butte have been receiving enough persistent smoke to settle into the bottom of the [UNHEALTHY FOR SENSITIVE](#) range but only [MODERATE](#) conditions are impacting the areas around Whitefish, Kalispell, Missoula, Helena, Cut Bank, Choteau, Augusta, and Great Falls. Smoke impacts under the plume aloft will increase sharply for a few hours later this morning. See the forecast below for details. Direct smoke impacts from local fires may be severe today. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale.

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

The picture below is from a Glacier National Park webcam looking over Lake McDonald. Tendrils of smoke aloft from the Brush Creed Fire west of Whitefish will be mixing down to the surface later this morning.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM July 31, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	Hamilton T24 Butte T24
<u>MODERATE</u>	Whitefish T24 Kalispell T24 Missoula T24 Helena T24 Cut Bank Vis(2) Choteau T24 Augusta T24 Great Falls Vis(1)

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

There is a visible back edge to the plume of smoke aloft in this morning's satellite photo. A cool front is working its way into the state from Canada and this will provide some blue sky to areas that have been seeing persistent haze for a while today. Smoke production levels will be very high again today and the plumes should start heading southeast by this afternoon. This could bring a lot of smoke into the northern Flathead Valley and impacts in the Kalispell area may be severe later this afternoon. The Front Range area will continue to see a lot of smoke throughout the day. Late morning smoke impacts at the surface will be noticeable again today in the areas under the plume aloft. Smoke impacts in southwest Montana will also likely rise with the shift in transport winds. North winds over the Meriwether fire northeast of Helena could also send a lot of smoke into the Helena Valley by tomorrow. Continued hot, dry, and windy weather will increase fire activity levels and smoke production this afternoon producing [UNHEALTHY](#) smoke impacts in areas near large fires. Residents in those areas need to

pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

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